

<https://www.youtube.com/watch?v=mFm3yA1nsIE>

Taste and Smell

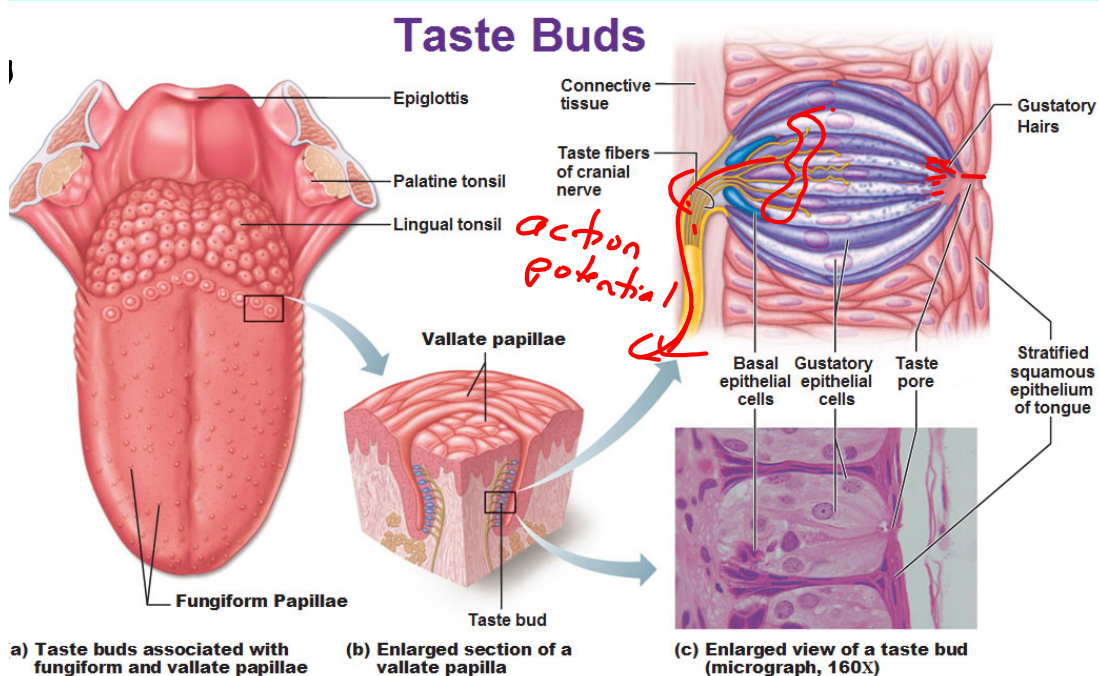
Taste receptors enable you to differentiate between food and inedible matter.

Human taste receptors are centralized within the taste buds of the tongue.

Specific chemicals (shape) stimulate the receptors embedded in the tongue.

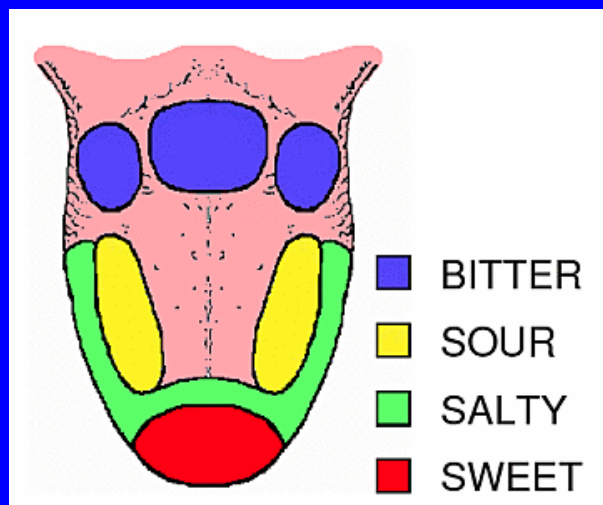
these are specialized epithelial cells

2 types - gustatory and basal

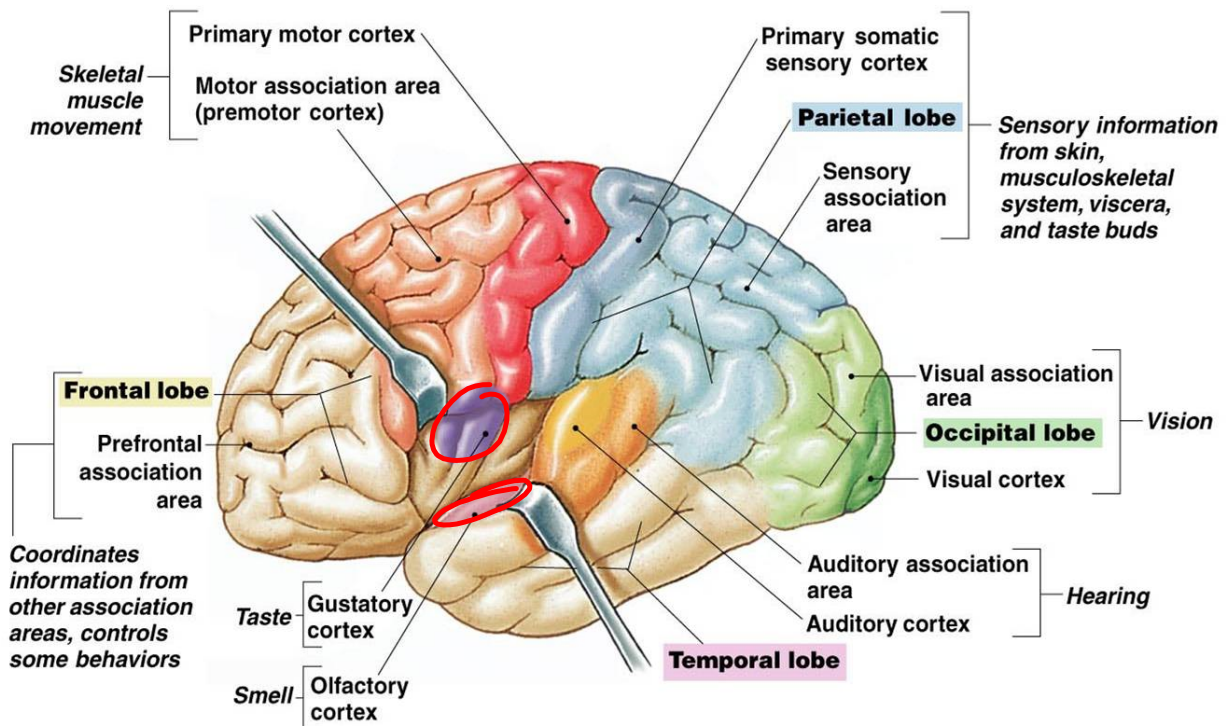


taste molecules move into small hole at the front of the gustatory cell

they stimulate hairs on gustatory cell - trigger an action potential



these areas seem to be able to identify each taste more prominently than the others however all areas can identify the other tastes



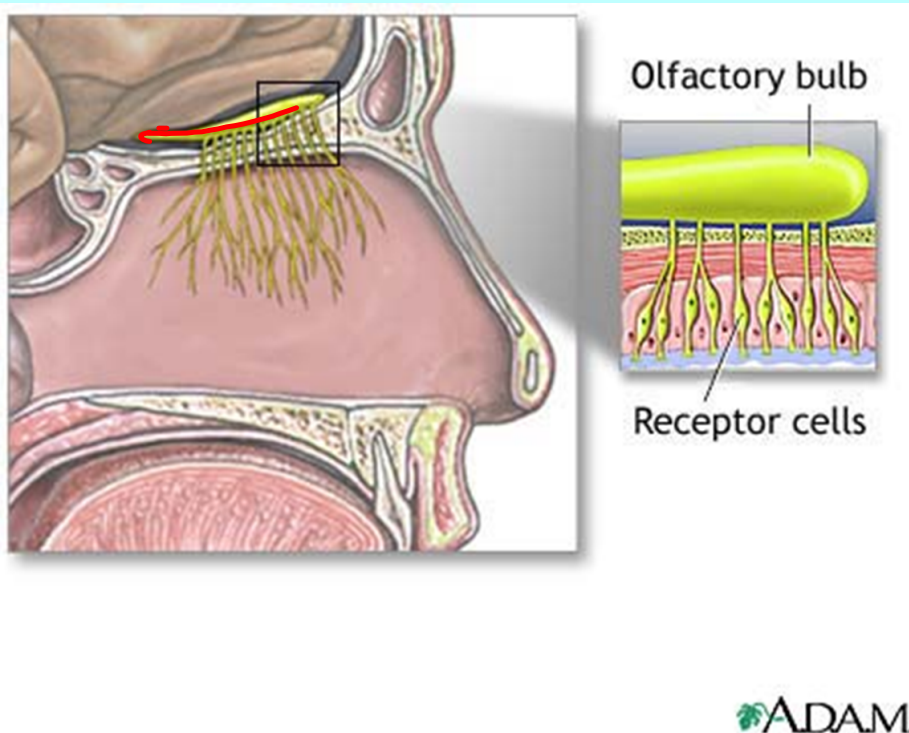
Protection

nerve impulse travel to gustatory cortex (in cerebral cortex)

brain interprets signal and sends message to digestive system to produce enzymes and gastric juices to breakdown food.

Smell

Olfactory cells are located in the nasal cavity.



Airborne chemicals combine with finely branched receptors ends on the olfactory cells... glomerulus to mitral cells

This causes an impulse to be sent to brain -- frontal lobe and hypothalamus- for interpretation

* taste is 80% smell